Day 2: Weather vs. Climate
Earth Science

Date:_____
Grade(s):_____

Next Gen Science Standards:		
Students who demonstrate understanding can:		
HS-LS2-6. Evaluate the claims, evidence, and reasoning that the complex interactions in ecosystems maintain relatively consistent numbers and types of organisms in stable conditions, but changing conditions may result in a new ecosystem.		
SCIENCE AND ENGINEERING	**DISCIPLINARY CORE IDEAS**	**CROSS-CUTTING CONCEPTS**
7. Engaging in argument from evidence	LS2.C: Ecosystem Dynamics, Functioning, and Resilience	*7. Stability and Change*

Instructional Objective(s):
Students will be able to: 1. Compare and contrast weather and climate. 2. Predict the effects of climate change on life.

Prerequisite Concepts and Skills:
Vocabulary weather, climate, atmospheric circulation, climate change, feedback loops, physical process, chemical process, carrying capacity, morphological, physiological, behavioral traits, adaptation, redistribution,

Materials and Resources:

Teacher	Students
Video *Earth: Climate and Weather* http://video.nationalgeographic.com/video/science/earth-sci/climate-weather-sci/ Or use the downloaded video, *Climate vs Weather* Presentation – Animal Traits (NPS provided) Procedure 2.1 (NPS provided)	Worksheet 2.1 (NPS provided master copy)

Lesson Activities: 58 min

Teacher Activities	Student Activities	Time:
Introduction:	1. DoNow- How do animals adapt to their	5 min

This lesson was created in partnership with the Teacher-Ranger-Teacher program through the National Park Service.

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1. Display the DoNow. 2. Take attendance.	climate?	
New Content: 1. Display video *Earth: Climate and Weather.* 2. Monitor students as they complete a Venn diagram showing similarities and differences between weather and climate Worksheet 2.1. 3. Guide brainstorming activity. Record list or have volunteer record. 4. Lecture/Notes: Presentation to define morphological, physiological, and behavioral traits of animals. 5. Carrying capacity bucket demo. Procedure 2.1	1. Watch the video *Earth: Climate and Weather.* 2. Complete Weather/Climate Venn Diagram 3. Brainstorm: What changes can be observed during different seasons? (plants, animals, weather, water, daylight, temperature, …) 4. Record notes and participate in class discussion. 5. In three paragraphs, in your own words, describe carrying capacity. (Intro, Body, Concl.).	4 min 6 min 8 min 20 min 10 min
Wrap-up: 1. Monitor students exit ticket. 2. Dismiss students.	1. Exit ticket – Based on what you know about traits of animals, predict some of the effects of climate change on animals.	5 min

Organizational and/or Behavioral Management Strategies:

Assessment and Evaluation:

Extensions:

Adaptations:

Teacher Reflections: